

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Addiese: COMMISSIONER FOR PATENTS P O Box 1450 Alexandra, Virginia 22313-1450 www.wepto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/826,232	04/16/2004	Carol A. Tosaya	D-03020A	9638
7590 04/22/2011 John w. Sliwa 24871 Olive Tree Lane			EXAMINER	
			SCOTT, BRANDY C	
Los Altos Hills, CA 94024			ART UNIT	PAPER NUMBER
			3767	
			MAIL DATE	DELIVERY MODE
			04/22/2011	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.	Applicant(s)	
10/826,232	TOSAYA ET AL.	
Examiner	Art Unit	
BRANDY C. SCOTT	3767	

The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. Exercise of time may be available under the previous of 37 CFR 1.139(a). In or went, however, may a caply be timely filed after SIX (6) MONTH'S form the mailing date of this communication.
• INO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. Failure to reply within the set or extended period for reply will, by abetic, cause the application to become ARANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned pattern term adjustment. Sen 37 CPR 1.704(b).
Status
1) Responsive to communication(s) filed on 14 February 2011.
2a) ☑ This action is FINAL . 2b) ☐ This action is non-final.
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.
Disposition of Claims
4) Claim(s) 89-102 is/are pending in the application.
4a) Of the above claim(s) is/are withdrawn from consideration.
5) Claim(s) is/are allowed.
6)⊠ Claim(s) <u>89-101</u> is/are rejected.
7) Claim(s) 102 is/are objected to.
8) Claim(s) are subject to restriction and/or election requirement.
Application Papers
9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on 16 April 2004 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.
Priority under 35 U.S.C. § 119
12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) ☐ All b) ☐ Some * c) ☐ None of:
a) All b) Some col None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No
a) All b) Some c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 3. Copies of the certified copies of the priority documents have been received in this National Stage
a) ☐ All b) ☐ Some * c) ☐ None of: 1. ☐ Certified copies of the priority documents have been received. 2. ☐ Certified copies of the priority documents have been received in Application No 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
a) All b) Some c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 3. Copies of the certified copies of the priority documents have been received in this National Stage
a) ☐ All b) ☐ Some * c) ☐ None of: 1. ☐ Certified copies of the priority documents have been received. 2. ☐ Certified copies of the priority documents have been received in Application No 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
a) ☐ All b) ☐ Some * c) ☐ None of: 1. ☐ Certified copies of the priority documents have been received. 2. ☐ Certified copies of the priority documents have been received in Application No 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

1) Notice of References Cited (PTO-892) 2) Notice of Eraftsperson's Patent Drawing Fleview (PTO-942)

 Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date

4) Interview Summary (PTO-413) Paper No(s)/Mail Date. ___ 5) Notice of Informal Patent Application

6) Other: __

Art Unit: 3767

DETAILED ACTION

Claim Rejections - 35 USC § 103

 The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

 Claims 89-101 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 2002/0177843 to Anderson in view of 5,713,831 to Olsson.

As to claims 89 and 100, Anderson discloses a minimally invasive (¶0003) apparatus comprising: at least one distal acoustic emitter capable of directing acoustic energy toward a target and recovering a desired degree of actuation; an exciter to power and control the emitters acoustic operation; a proximally grippable scope, catheter, handle, guidewire, sheath or a gripping robot distally supporting the emitter and allowing a practitioner to control acoustic coupling of and use of the emitter on the target; wherein by actuating is specifically meant that the implant or body member has (a) adjacent, joined or mating portions which normally at least one of swing, hinge, pivot, distend, or flex relative to each other at least once or (b) mating parts which are plugged, connected, threaded or passed into or through each other at least once (pivot; ¶0028). Anderson discloses cauterization of tissue which is a process for removing an undesired growth, or minimizing other potential medical harmful possibilities such as infections, when antibiotics are not available (¶0028). Anderson does not disclose the emitter including a deformable or soft standoff, the standoff at least one of (i) preventing

Art Unit: 3767

or inhibiting direct emitter-target contact, (ii) allowing for gentle stoppage or suppression of the targets actuation for deposit removal, and (iii) allowing for passage of the emitter into or through the actuator without damaging the actuator. Olsson discloses a device that transforms supplied energy into ultrasound signals and transmits the ultrasound signals into a body sufficiently to influence the dissolution of undesirable growth (abstract) where the emitter (1) is situated behind a deformable or soft standoff (patient's skin, 3) preventing or inhibiting direct emitter-target contact (In Figure 3, the target is a thrombus (7) located in the coronary artery (8), but the emitter is not in direct contact with the artery (8)). At the time of invention, it would have been obvious to one of ordinary skill in the art to modify the emitter of Anderson with the emitter to Olsson to

As to claim 90, Anderson discloses the apparatus wherein the actuation comprises pivoting (¶0028).

As to claim 91, Anderson in view of Olsson discloses the apparatus wherein the implant or member is cardiac (Figure 3).

As to claims 92, Anderson in view of Olsson discloses the apparatus wherein a chemical agent is employed at any time to aid in the acoustic removal of the deposit material in any manner (Column 1, lines 57-60).

As to claim 93, Anderson in view of Olsson discloses the apparatus wherein the acoustic power employed is sufficient to cause at least one of blood streaming, blood or deposit cavitation, deposit erosion or deposit-heating useful in said removal (Column 3, lines 6-13).

Art Unit: 3767

As to claims 94-98, Anderson in view of Olsson discloses the apparatus wherein the acoustic power is being delivered continuously, wherein acoustic signatures are employed to guide the removal task (Column 3, lines 34-42).

As to claim 99, Anderson in view of Olsson discloses the apparatus wherein a cavitation enhancing agent (heat) is employed (Column 1, lines 57-60).

As to claim 101, Anderson discloses the apparatus wherein the actuation occurs between two or more portions of one or more natural body parts (¶0100).

Allowable Subject Matter

 Claim 102 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

4. Applicant's arguments filed 2/14/2011 have been fully considered but they are not persuasive. Applicant argues that "Applicants claim an apparatus for recovering the normal full motions or actuations of bodily parts." However, the claim reads "invasive apparatus for removal, breakdown or erosion of undesirable deposits present on, at or in actuating bodily implants or actuating bodily-members or organs of a patient." The robotic members of Anderson could be considered "actuating bodily implants" since they are medical instruments inserted into the body for a period of time. Applicant should consider amending to further limit the claim to read exclusively on body parts. Applicant argues that Anderson teaches contact with the tissue but Anderson in view of Olsen teach preventing or inhibiting direct emitter-target contact with the tissue that is

Art Unit: 3767

actually being treated. Furthermore, the emitter can include the skin between the device and the treatment site since it is included in the transmission of radiation.

Conclusion

 THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to BRANDY C. SCOTT whose telephone number is (571)270-7410. The examiner can normally be reached on Monday-Friday, 7:30am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kevin Sirmons can be reached on (571)272-4965. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Application/Control Number: 10/826,232 Page 6

Art Unit: 3767

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/B. C. S./ Examiner, Art Unit 3767 /KEVIN C. SIRMONS/

Supervisory Patent Examiner, Art Unit 3767